REMARKS

Claims 1-18 are pending in the application. Claims 1, 8-9 and 18 have been amended. The applicant requests reconsideration of claims 1-18 in view of these amendments and the following remarks.

Claims 1-18 stand rejected under 35 U.S.C. §§ 102(b) and/or 103(a) in view of the article "Web Graphics Software Packages: Software Review: Evaluation" appearing in volume 17, number 19 of PC Magazine ("the Simone article"), and U.S. Patent No. 5,231,504 to Magee ("the Magee patent"). In particular, the Examiner reads the Simone article to anticipate claims 1-6 and 8, and to render obvious claims 9-10, 12-13 and 18. The Examiner also reads the combination of the Simone article and the Magee patent to render obvious claims 7, 11, and 14-17. The applicant has amended claims 1, 8-9 and 18 to more distinctly claim and particularly point out the invention. The applicant submits that the Simone article, either alone or in combination with the Magee patent, fails to anticipate or render obvious any of claims 1-18, as amended, and traverses the Examiner's rejection of these claims for the reasons noted below.

Claims 1-8, as amended, respectively recite a method for selecting a rendering intent and a computer program product implementing the claimed method, that comprises "providing a plurality of contrast modes; receiving input selecting a contrast mode; simultaneously previewing a plurality of images according to the selected contrast mode; and selecting a rendering intent by receiving from a user a selected image from the plurality of images simultaneously previewed according to the selected contrast mode."

In FIG 3 of the application as originally filed, the specification discloses one implementation of a method for receiving user input to select a contrast mode. As shown in FIG 3, a program module ("Contrast Images Module") receives at step 301 user input that selects one of two contrast modes, contrast rendered images or contrast rendered image differences. The program module checks the user input at step 302, and if "the user elects to contrast rendered images at step 302, Contrast Images Module 300 contrasts the set of rendered images by previewing them." *Specification*, p. 6, ll. 9-11. On the other hand, if the user "elects to contrast rendered image differences at step 302, Contrast Images Module 300 initializes a list of rendered

differences at step 303." *Id.* at ll., 19-21. The rendered differences are difference images that "are constructed between a rendered image and a reference image." *Id.* at ll. 24-25. The reference image can be, e.g., the source image or another rendered image. *Id.* at ll. 25-27. A rendered difference image can be constructed from a rendered image and the reference image in a variety of ways including, e.g., by taking the simple difference between the two images, by taking the least squares or sum-of-squares difference between the two images, by taking the difference between the two images using other distance metrics, or by making a topographical map of the differences between the two images. *Id.*, at p.6 line 28 to p. 7, line 29. Once the rendered difference images are constructed, the Contrast Images Module contrasts them by simultaneously previewing them, e.g., "by displaying them on a monitor," or by "displaying their color values ... on a monitor," or by "printing them on a printer." Id., at p. 8, ll. 12-17.

The Simone article fails to disclose this or a similar method for "providing a plurality of contrast modes; receiving input selecting a contrast mode; and simultaneously previewing a plurality of images according to the selected contrast mode." For example, on page 8, paragraph 3, the Simone article merely discloses that the **Fireworks** program can open and display image files that are stored in a number of different file formats, including PNG files, bitmap files, Adobe Illustrator files, CorelDraw files, and Macromedia Freehand files. Similarly, on page 22, paragraph 1, the Simone article merely discloses that the **Fireworks** program can simultaneously preview output images that have been compressed using different compression algorithms, (e.g., JPEG, GIF, or PNG), or that have been painted using different color palettes, (e.g., web-safe, adaptive or perceptual), or using color palettes that have a different number of colors. The ability of the **Fireworks** program to open files that have been saved in a number of different file formats, or to simultaneously preview output files that have been created using different compression algorithms, or using different color palettes neither discloses nor even suggests that the program "provid[es] a plurality of contrast modes (e.g., rendered images or rendered image differences); receiv[es] user input selecting a contrast mode; and simultaneously preview[s] a plurality of images according to the selected contrast mode" as recited in amended claims 1-8.

Consequently, claims 1-8, as amended, are patentable over the **Fireworks** program and the Simone article for at least this reason.

Claims 9-18, as amended, respectively recite a method for selecting a rendering intent and a computer program product implementing the claimed method, that comprises "simultaneously previewing a plurality of difference images, wherein each difference image is generated from one of the plurality of rendered images and a reference image." The Examiner apparently concedes that the Simone article fails to disclose this limitation, but argues that the limitation is obvious because Simone teaches "editing a file by dithering control and simultaneously previewing multiple variations of a file (pp. 8, Para. 3-4), with the ability for each preview to have its own settings and formats (pp. 24, Para 1), which would enable the simultaneous display of a plurality of difference images." Office Action, p. 5, ¶ 4. The applicant respectfully disagrees.

As explained above, and as explicitly recited in claims 9-18, a difference image is an image that is "generated from one of the plurality of rendered images and a reference image." The Simone article fails to disclose a method for "simultaneously previewing a plurality of difference images" as suggested by the Examiner. For example, on page 8, paragraphs 3-4, the Simone article merely discloses that the **Fireworks** program can open and display image files that are stored in a number of different file formats, (e.g., PNG, bitmap, Adobe Illustrator, CorelDraw, and Macromedia Freehand), can output image files using a number of different color palettes (e.g., web-safe and adaptive), and can control how the colors in the input file are dithered to the colors in the limited color palette of the output file. Similarly, on page 24, paragraph 1, the Simone article merely discloses that the **Fireworks** program can simultaneously preview output images that have different output formats and settings, e.g., output images that use different compression algorithms (JPEG, GIF, or PNG), use different color palettes (web-safe, adaptive or perceptual) containing different numbers of colors, and that use different dithering algorithms to dither colors in the output image to approximate the colors in the input image. See, Simone at pp. 22-23. The ability of the **Fireworks** program to open files that have been saved in a number of different file formats, or to simultaneously preview output files that

have different file formats, or that use different compression algorithms, color palettes, or dithering algorithms neither discloses nor even suggests that the program "simultaneously preview[s] a plurality of difference images, wherein each difference image is generated from one of the plurality of rendered images and a reference image" as recited in claims 9-18, as amended. Consequently, claims 9-18 are patentable over the **Fireworks** program and the Simone article for at least this reason.

Claims 14-16 recite the method of claim 9, wherein a difference image is generated from a rendered image and a reference image by "subtracting the reference image from a rendered image" (claim 14), "calculating the least-squares difference between a rendered image and the reference image" (claim 15), or "representing the differences between a rendered image and the reference image as a topological map" (claim 16). The Examiner admits that the Simone article fails to disclose any of these limitations, but suggests that they are all obvious limitations because the Magee patent discloses subtracting images at col. 1, ll. 10-15, calculating a least-squares difference between images at col. 2-3, ll. 62-15, and representing the difference between images as a topological map at col. 17, ll. 15-40. The Examiner argues that it would obvious to apply the teachings of the Magee patent to the Simone article since Simone teaches providing and specifying dithering control.

The applicant respectfully disagrees for at least two reasons. First, the Magee patent fails to disclose any of the limitations recited in claims 14-16 as explained more fully below. Second, even if the Magee patent did disclose or suggest these limitations, the fact that the Simone article discloses that the **Fireworks** program can dither colors in an output image would in no way suggest to one of skill in the art that the program could be modified to create difference images. A dithered output image is an output image having a limited color palette in which colors that are not available in the limited color palette are simulated by creating pixel patterns of related colors that are available in the limited color palette. These pixel patterns are blended in the mind of an observer to create the illusion of seeing the colors that are not available in the limited color palette. Thus, a dithered output image is not a difference image, is not generated from a difference image, and is not used to generate a difference image. Consequently, disclosing the

creation of dithered output images would not suggest to one of skill in the art that difference images could be created by subtracting a rendered image from a reference image (claim 14), by calculating a least-squares difference between the rendered and reference images (claim 15), or by making a topographical map representing the differences between the rendered and reference images (claim 16). Claims 14-16 are therefore patentable over the combination of the Simone article and the Magee patent for at least this reason.

More importantly, the Magee patent simply fails to disclose any of the limitations recited in claims 14-16. At col. 1, ll. 10-15, the Magee patent discloses that the field of his invention is "accurately producing a color in a subtractive color printing system." A subtractive color printing system is a printing system that displays colors using a subtractive color model such as the CMYK color model that is used by color ink jet printers. Indeed, the Magee patent discloses that "[d]igital color printers, color copiers, color electrostatic plotters, and similar printing devices ... produce color according to a subtractive color process by applying the primary coloring agents ... to a white medium." Col. 1, ll. 44-50. The Magee patent also discloses that, "colors displayed on a device using a subtractive color system are comprised of certain amounts of cyan, magenta, and yellow (CMY) primary coloring agents." Col. 1, ll. 55-58. Thus, at col. 1, ll. 10-15, the Magee patent simply discloses that Magee's invention concerns accurately producing colors in a printing system that uses a CMYK or other subtractive color model, and fails to disclose or to even suggest generating a difference image "by subtracting [a] reference image from a rendered image" as recited in claim 14. Consequently, claim 14 is patentable over the combination of the Magee patent and the Simone article for at least this reason as well.

In the paragraph from col. 2, line 62 to col. 3, line 15, the Magee patent discloses that mapping colors "from an additive color system's gamut to a subtractive color system's gamut," i.e., from an RGB color model to a CYMK color model, generally requires the use of "look up tables, matrices, or mathematical transformations." Col. 2, ll. 62-65. When a lookup table is used, the table will often be a "Least Squares Look-Up Table" that maps a color from the additive color system (e.g., an RGB color) to a color in the subtractive color system (e.g., a CYMK color) that is the closest in color to the color in the additive color system in a "least

squares" sense. Again, this disclosure in Magee of using a Least Squares Look-up table to map colors from an additive color system to a subtractive color system fails to disclose or to even suggest generating a difference image "by calculating the least-squares difference between a rendered image and the reference image" as recited in claim 15. Consequently, claim 15 is patentable over the combination of the Magee patent and the Simone article for at least this reason as well.

Finally, at col. 17, ll. 15-40, the Magee patent discloses a method of finding the pure hue of a color from a mixture of colorants "by determining the relative quantities of the two selected primaries which generate it, based on the position of an intersection point along the linear mixing line." Col. 17, ll. 15-18. The Magee patent describes this method in more detail, but nowhere does it mention using or generating any topographical maps, nor does it disclose or even suggest generating a difference image by "representing the differences between a rendered image and the reference image as a topological map" as recited in claim 16. Consequently, claim 16 is patentable over the combination of the Magee patent and the Simone article for at least this reason as well.

The applicant respectfully submits that claims 1-18, as amended, are in condition for allowance, which action is requested. No fees are believed due, however, please apply any applicable charges or credits to deposit account 06-1050.

Respectfully submitted,

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